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Patent Claims

1. A device (8) for determining a rotational speed about the vertical axis of a vehicle (1), comprising a rotational speed sensor (9) which outputs a signal which is dependent on the rotational speed about the vertical axis, a signal evaluation means (10) which determines the rotational speed from the signal supplied by the rotational speed sensor (9), a radiation sensor (11) for sensing an angle (12) of a preceding vehicle (13, 14) located in the region ahead of the vehicle (1) relative to the vehicle (1), the data from the radiation sensor (11) being supplied to the signal evaluation means (10) in order to sense the angle (12) and being taken into account in the compensation of the offset error of the rotational speed sensor (9), characterized in that only signals of the rotational speed sensor (9) at which the angle (12) of the preceding vehicle (13, 14) located in the region ahead of the vehicle (1) is approximately 0 degrees are used to determine the offset error.

2. The device (8) as claimed in claim 1, characterized in that only the signals of the rotational speed sensor (9) which are sensed in a predefined time interval are used to determine the offset error and are averaged over the signals of the rotational speed sensor (9) which are sensed in the predefined time interval.

3. The device (8) as claimed in claim 1, characterized in that the change in the rotational speed of the rotational speed sensor (9) can be determined over time in order to draw conclusions about the stability of the rotational speed.

4. The device (8) as claimed in claim 1, characterized in that the angle (12) of the preceding vehicle (13, 14) located in the region ahead of the vehicle (1) can be determined in relation to the longitudinal axis (15) of the vehicle (1).

5. The device (8) as claimed in claim 1, characterized in that the vehicle (1) and the preceding vehicle (13) move in the same direction of travel, the actual speed of the preceding vehicle (13) being greater than or less than the actual speed of the vehicle (1).